

A review of the genus *Syntypistis* Turner in China (Lepidoptera: Notodontidae)

WU Chun-Sheng, FANG Cheng-Lai

(Institute of Zoology, Chinese Academy of Sciences, Beijing 100080, China)

Abstract: This paper deals with the 20 species of *Syntypistis* Turner found in China, including one new species, *Syntypistis melana* Wu et Fang, sp. nov., and two new records for China, *Syntypistis hercules* (Schintlmeister, 1997) comb. nov. and *Syntypistis defector* (Schintlmeister, 1997) comb. nov. The male genitalia of the new species and the newly recorded species are illustrated. A key to the Chinese species is provided.

Key words: Lepidoptera; Notodontidae; *Syntypistis*; new species; China

The genus *Syntypistis* Turner comprises about 60 species in the world. Its distributional range includes Japan, Korea, China, Pakistan, India, Nepal, Vietnam, Thailand, Myanmar, Philippines, Malaysia, Indonesia and Australia.

Cai (1979) described the 4 known species in China. Schintlmeister (1989, 1992) reported the 11 Chinese species. Yang (1995) described 2 new species from Zhejiang. Schintlmeister et Fang (2001) published 2 new species from China. In this paper, we recognize 20 Chinese species including one new species.

The type specimens are deposited in the Institute of Zoology, Chinese Academy of Sciences, Beijing, China.

Syntypistis Turner, 1907

Syntypistis Turner, 1907, *J. Linn. Soc. (Zool.)* 12: 405.

Type-species: *Syntypistis chloropasta* Turner, 1907, by monotypy.

Quadricalcarifera Strand, 1915, *Arch. F. Naturg.* 81A 12: 160. Type-species: *Stauropus* (*Quadricalcarifera*) *subgeneris* Strand, 1915, by monotypy.

Taiwa Kiriakoff, 1967, *Tijdschr. Ent.* 110: 51. Type-species: *Stauropus confusa* Wileman, 1910, by original designation.

Egonocia Marumo, 1920, *J. Coll. Agric. Imp. Univ. Tokyo* 6: 333. Type-species: *Somera cyanea* Leech, 1889, by

original designation.

Labial palpus longer. Antennae bipectinate at about 4/5 of apex in both sexes. Hind tibia with 2 pairs of spurs. Forewing veins without areole; M_1 from upper angle of cell. Hindwing with M_1 and R_s stalked short. Male genitalia: uncus and gnathos developed; valva narrow and long, apex usually with spines; saccus long. Female genitalia with antrum; corpus bursae longitudinally with 2–3 rows of minute denticles, which range into an incomplete hoop.

This genus is similar to *Stauropus*, but differs from the latter in the longer palpus and the forewing without areole.

Key to Chinese species of *Syntypistis*

Based on male external characters

1. Forewing with large white patches on median area 2
Forewing at most with some small white spots 3
2. Forewing with a row of big white spots on subterminal area
..... *S. fasciata*
Forewing without white spots on subterminal area
..... *S. comatus*
3. Forewing grayish white to grayish brown 13
Forewing reddish brown to blackish brown 4
4. Forewing reddish brown 5
Forewing blackish brown 9
5. Forewing without green scales *S. subgeneris*
Forewing scattered with green scales 6

6. Green scales forming a patch on forewing base 7
Green scales not forming a patch on forewing base 8
7. Forewing with an irregular green patch on base
..... *S. cupreonitens*
Forewing with a roughly quadrate green patch on base, inner fascia black *S. ambigua*
8. Forewing with more green scales, basal width more narrow ...
..... *S. viridipicta*
Forewing with less green scales, basal width wider
..... *S. cyanea*
9. Forewing at most with a few green scales 10
Forewing with a lot of green scales 11
10. Forewing without big pale spot on median costa
..... *S. melana*
Forewing with big pale spot on median costa ... *S. hercules*
11. Forewing densely scattered with green scales 12
Forewing with sparse green scales *S. jupiter*
12. Forewing without median fascia *S. defector*
Forewing with black median fascia *S. spitzeri*
13. Forewing with green scales 14
Forewing without obvious green scales 15
14. Forewing with a green outer fascia *S. parcevirens*
Forewing without green outer fascia *S. umbrosa*
15. Forewing with a vague subterminal fascia
..... *S. subgriseoviridis*
Forewing with a clear subterminal fascia 16
16. Forewing primarily white, with wavy brown lines
..... *S. perdis*
Forewing primarily grayish brown, with white spots 17
17. Forewing black at base 18
Forewing base black and white at least on costa 19
18. Forewing with 3 grayish white spots near costa in middle
..... *S. victor*
Forewing with a grayish white spot in cell ... *S. nigribasalis*
19. Forewing with pale yellow longitudinal stripes at base on inner margin *S. witoldi*
Forewing base black on inner margin *S. pryri*
5. Saccus short; posterior margin of 8th sternite deeply concave
..... *S. comatus*
Saccus long; posterior margin of 8th sternite shallowly concave
..... *S. subgeneris*
6. Aedeagus apically widening slightly and bearing dents 7
Aedeagus apically pointed 10
7. Posterior margin of 8th sternite concave in trapezium 8
Posterior margin of 8th sternite concave in arc 9
8. Valva with a short spine at end; posterior margin of 8th tergite almost straight *S. subgriseoviridis*
Valva with a long spine at end; posterior margin of 8th tergite concave *S. ambigua*
9. Juxta caudal margin not protruding; posterior margin of 8th sternite pointed laterally *S. fasciata*
Juxta caudal margin protruding laterally; posterior margin of 8th sternite rounded laterally *S. ambigua*
10. Posterior margin of both 8th sternite and tergite deeply concave
..... *S. melana*
Posterior margin of 8th segment shallowly concave in sternite, straight in tergite 11
11. Apex of uncus pointed *S. defector*
Apex of uncus with 2 dents *S. parcevirens*
12. Tegumen with a process in middle of each arm 13
Tegumen without process in each arm 14
13. Valva with 2 spines at end *S. viridipicta*
Valva with one spine at end *S. cyanea*
14. Valva without process at end 15
Valva with spines at end 16
15. Valva base 1/2 as wide as its end *S. witoldi*
Valva base slightly more narrow than its end *S. perdis*
16. Valva with a big and a small spines at end 17
Valva only with a big spine at end 19
17. Saccus short *S. jupiter*
Saccus long 18
18. Apex of uncus forked *S. hercules*
Apex of uncus pointed *S. umbrosa*
19. Gnathos with 2 spines at end; aedeagus longer than valva-length
..... 20
Gnathos apically pointed; aedeagus shorter than valva-length
..... *S. spitzeri*
20. Uncus and gnathos long, saccus thick *S. pryri*
Uncus and gnathos relatively short; saccus slender
..... *S. cupreonitens*

Based on male genitalia

1. Gnathos wide, more than 2 times width of uncus 2
Gnathos narrow, less than 1.5 times width of uncus 12
2. Valva without process at end; gnathos trigonal
..... *S. nigribasalis*
Valva with spines at end; gnathos bell-like 3
3. Valva apically forked 4
Valva with a spine at end 6
4. Uncus longer than gnathos; posterior margin of 8th sternite straight *S. victor*
Uncus shorter than gnathos, posterior margin of 8th sternite concave 5

Syntypistis comatus (Leech, 1898)

Stauropus comatus Leech, 1898, *Trans. Ent. Soc. London* 1898: 306.

Quadricalcarifera comatus: Schintlmeister, 1992: 96.

Quadricalcarifera viridimacula Matsumura, 1922, *Zool. Mag.*, Tokyo 34: 521.

Quadricalcarifera fasciata: Cai, 1979: 50 [misidentification].

Host plants: *Pterocarya stenoptera*, *Quercus* spp.

Specimens examined: Fujian: 1 ♀, Jianyang Co., 1973. VI. 30; 1 ♂ 1 ♀, Sangang, 1981. V. 6, 1980. VIII. 23; 1 ♂, Mt. Wuyishan, 1982. IX. 21. Jiangxi: 1 ♀ 1 ♂, Mt. Jiulianshan, 1979. IX. 25, 1975. VI. 22. Hubei: 1 ♀, Shennongjia Forest Dist. (860 m), 1981. VIII. 21. Hunan: 1 ♂ 2 ♀ ♀, Zhangjiajie City, 1988. VIII. 18; 1 ♀, Mt. Tianping-shan, 1988. VIII. 15. Guangxi: 1 ♀, Jinxiu Co. (900–1 900 m), 2000. VI. 28. Hainan: 2 ♀ ♀, Mt. Jianfengling, 1978. IV. 15, 1982. IV. 20; 1 ♂, Mt. Limushan, 1984. V. 26. Sichuan: 1 ♂ 1 ♀, Xichang City, 1974. VIII. 3; 1 ♂, Mt. Emeishan, 1977. VIII; 1 ♂ 1 ♀, Mt. Qingchengshan (1 000 m), 1979. VI. 4. Yunnan: 2 ♂ ♂, Kunming City (2 000 m), 1980. VII. 3–VIII. 19; 1 ♀, Fengqing Co. (1 800 m), 1980. VII. 9; 1 ♂, Longkou (1 200 m), 1979. V. 7; 1 ♀, Luxi City (1 200 m), 1980. V. 5. Xizang: 1 ♀, Yadong Co., 1984. VIII. 29. Gansu: 1 ♂, Dangchang Co. (1 800 m), 1998. VII. 7.

Distribution: Fujian, Jiangxi, Hubei, Hunan, Guangdong, Guangxi, Sichuan, Yunnan, Xizang, Gansu, Taiwan; N. India, Myanmar, Thailand, Vietnam, Malaysia, Indonesia, Philippines.

Syntypistis fasciata (Moore, 1879)

Dasychira fasciata Moore, 1879, In: Hewitson & Moore. Descrip. New Indian lepid. Insects Colln. Late Mr. Atkinson. 58.

Quadricalcarifera fasciata: Kiriakoff, 1968: 122.

Syntypistis fasciata: Schintlmeister *et* Fang, 2001: 52.

Specimens examined: Yunnan: 2 ♂ ♂, Yunlong Co. (2 460 m), 1999. V. 10.

Distribution: Yunnan; Sikkim, India, Myanmar, Java.

Syntypistis hercules (Schintlmeister, 1997) comb. nov. (Fig. 1)

Quadricalcarifera hercules Schintlmeister, 1997, *Entomofauna*, suppl. 9: 92.

Quadricalcarifera chlorotricha: Cai, 1979: 50. [misidentification]

This is the first record of this species in China.

Specimens examined: Sichuan: 1 ♂ 1 ♀, Mt. Emeishan, 1957. V. 29.

Distribution: Sichuan; Vietnam.

Remarks: The male genitalia of the specimens from Sichuan differ from those from Vietnam in having a shorter valva. Probably our material belongs to a distinct subspecies, which should be described when more material is available from China.

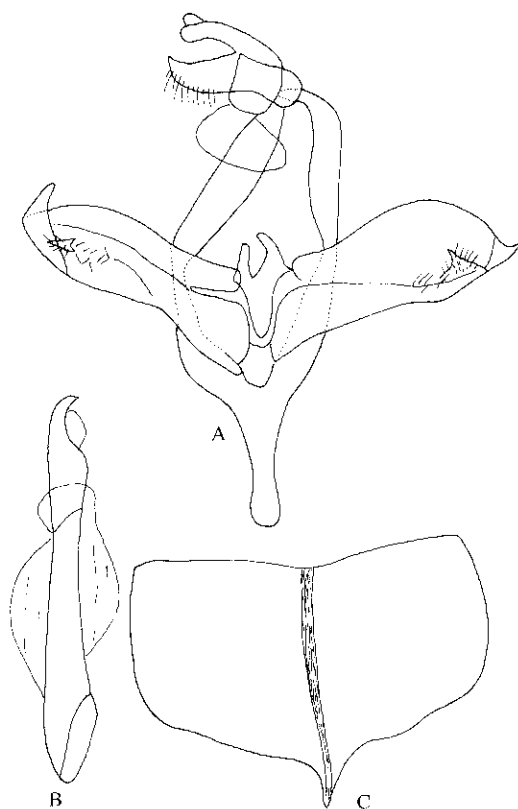


Fig. 1 *Syntypistis hercules* Schintlmeister
A. male genitalia (雄体外生殖器); B. aedeagus (阴茎);
C. 8th sternite (第8腹板)

Syntypistis subgriseoviridis (Kiriakoff, 1963)

Quadricalcarifera subgriseoviridis Kiriakoff, 1963, *Bonn. Zool. Beitr.* 14: 265

Syntypistis subgriseoviridis: Schintlmeister *et* Fang, 2001: 13 (list).

Quadricalcarifera cyanea: Cai, 1979: 50. [misidentification]

Host plants: *Carya cathayensis*.

Specimens examined: Zhejiang: 1 ♂, Mt. Tianmushan, 1973. VII. 24; 1 ♀, Hangzhou City, 1976. VII. 1; 3 ♂ ♂, Lin' an Co., 1964. VII. 25; 1 ♀, Ningbo City, 1941. VI. Jiangxi: 1 ♀,

Shangyou Co., 1975. VII. 4; 1 ♀, Mt. Lushan, 1932. VII. Hubei: 1 ♀, Zigui Co. (80 m), 1994. IV. 27. Hunan: 1 ♂, Cili Co., 1988. IX. 4. Guangxi: 1 ♀, Fangcheng Dist. (550 m), 2000. VI. 4; 1 ♂, Napo Co. (1 350 m), 2000. VII. 9; 1 ♂ 3 ♀ ♀, Mt. Maoershan (1 150 m), 1985. VII. 11. Sichuan: 1 ♂ 1 ♀, Mt. Emeishan (800 – 1 000 m), 1957. IV. 29; 2 ♀ ♀, Fengdu Co. (610 m), 1994. IV. 27; 1 ♂, Yunyang Co. (110 m), 1994. V. 25. Shaanxi: 1 ♂, Foping Co. (950 m), 1998. VII. 5; 1 ♂, Liuba Co. (1 020 m), 1998. VII. 12. Gansu: 2 ♀ ♀, Kangxian Co. (Qinghe Forest Farm, 1 400 m), 1999. VII. 7; 1 ♀, Yangba Forest Farm (1 020 m), 1999. VII. 10; 1 ♂, Wenxian Co. (Shanwangmiao, 1 500 m), 1999. VII. 28; 5 ♂ ♂ 6 ♀ ♀, Tielou (1 450 m), 1999. VII. 24.

Distribution: Jiangsu, Zhejiang, Jiangxi, Hubei, Hunan, Guangxi, Sichuan, Shaanxi, Gansu.

Syntypistis viridipicta (Wileman, 1910)

Stauropus viridipicta Wileman, 1910, *Entom.* 43: 312.

Quadricalcarifera viridipicta: Cai, 1979: 51; Schintlmeister, 1992: 92.

Quadricalcarifera medioviridis Kiriakoff, 1963, *Bonn. Zool. Beitr.* 14: 263.

Quadricalcarifera viridigutta Kiriakoff, 1963, *Bonn. Zool. Beitr.* 14: 266.

Desmeocraera marginalis Matsumura, 1920, *Zool. Mag. Toyo* 37: 392.

Desmeocraera kusukusuana Matsumura, 1929, *Ins. Matsum.* 4: 38.

Desmeocraera lineata Okano, 1960, *Ann. Rep. Gakugei Fac. Iwate Univ.* 16: 15

Specimens examined: Fujian: 2 ♂ ♂, Mt. Longqishan, 1991. VI. 6 – 20; 5 ♂ ♂, Nanjing City, 1973. VII. 14. Jiangxi: 3 ♂ ♂ 2 ♀ ♀, Mt. Jiulianshan, 1975. VI. 11; 1 ♂, Dayu Co., 1975. VII. 15. Hubei: 2 ♂ ♂, Xingshan Co. (1 350 m), 1993. VI. 20. Hunan: 3 ♂ ♂, Cili Co. (400 m), 1988. X. 18; 1 ♂ 1 ♀, Zhangjiajie City, 1988. X. 8; 2 ♂ ♂ 3 ♀ ♀, Guzhang Co. (850 m), 1988. VII. 29. Guangdong: 1 ♀, Mt. Jiulianshan, 1980. VII. 11. Guangxi: 1 ♀, Pingxiang City, 1976. VI. 17; 4 ♂ ♂, Longsheng Co., 1980. VI.

13. Hainan: 2 ♂ ♂ 1 ♀, Mt. Jianfengling, 1980. III. 22 – IV. 11. Guizhou: 1 ♂, Mt. Fanjingshan (500 m), 1988. VII. 11.

Distribution: Zhejiang, Fujian, Jiangxi, Hubei, Hunan, Guangdong, Guangxi, Hainan, Guizhou, Taiwan; India, Myanmar, Thailand, Vietnam, Malaysia, Indonesia.

Syntypistis cyanea (Leech, 1889)

Somera cyanea Leech, 1889, *Proc. Soc. Lond.* 1889: 642.

Quadricalcarifera cyanea: Kiriakoff, 1967: 81; Schintlmeister, 1992: 92.

Quadricalcarifera franciscana Kiriakoff, 1963, *Bonn. Zool. Beitr.* 14: 263.

Specimens examined: Jiangxi: 1 ♂, Anyuan Co., 1980. X. 14. Yunnan: 7 ♂ ♂, Xishuangbanna Pref. (620 – 700 m), 1982. IV. 21, 1993. IX. 6.

Distribution: Zhejiang, Fujian, Jiangxi, Guangdong, Yunnan, Taiwan; Japan, Korea, Vietnam.

Syntypistis ambigua Schintlmeister et Fang, 2001

Syntypistis ambigua Schintlmeister et Fang, 2001, *Neue Ent. Nachr.* 50: 49

Specimens examined: Hubei: 3 ♂ ♂, Xingshan Co. (1 350 m), 1994. V. 6 – 9 (holotype and paratypes). Hunan: 1 ♀ 1 ♂, Sangzhi Co. (1 300 m), 1981. VI. 25 (paratype), 1988. VIII. 11; 1 ♂, Zhangjiajie City, 1988. VIII. 18. Guangxi: 1 ♂, Napo Co. (1 350 m), 2000. VI. 19.

Distribution: Hubei, Hunan, Guangxi, Sichuan; N. Vietnam.

Remarks: The specimen from Zhangjiajie City does not match the holotype of *S. ambigua* very well in the shapes of the 8th sternite and tergite.

Syntypistis victor Schintlmeister et Fang, 2001

Syntypistis victor Schintlmeister et Fang, 2001, *Neue Ent. Nachr.* 50: 49

Specimens examined: Beijing: 1 ♂, Mt. Baihuashan (1 200 m), 1973. V. 26. (paratype). Liaoning: 1 ♀, Fengcheng Co., 1980. IV. 5 (paratype). Hubei: 1 ♀, Xingshan Co. (1 260 m), 1993. VII. 17. Shaanxi: 1 ♂, Foping Co. (1 600 m),

1999. IV. 30 (paratype).

Distribution: Beijing, Liaoning, Hubei, Shaanxi.

Syntypistis spitzeri (Schintlmeister, 1987)

Quadricalcarifera spitzeri Schintlmeister, 1987, *Entomofauna* 8: 56.

Syntypistis spitzeri: Schintlmeister *et* Fang, 2001, *Neue Ent. Nachr.* 50: 51.

Specimens examined: Jiangxi: 1 ♂, Mt. Jiulianshan, 1977. V. 20. Guangxi: 1 ♂, Mt. Maershan (1 100 m), 1985. VII. 13; 1 ♂, Jinxiu Co. (1 100 m), 2000. VII. 2. Yunnan: 1 ♂, Pingbian Co. (1 500 m), 1956. VI. 19.

Distribution: Jiangxi, Guangxi, Yunnan; Vietnam.

Syntypistis jupiter (Schintlmeister, 1997)

Quadricalcarifera jupiter Schintlmeister, 1997, *Entomofauna Suppl.* 9: 93.

Syntypistis jupiteri: Schintlmeister *et* Fang, 2001, *Neue Ent. Nachr.* 50: 51.

Specimens examined: Hainan: 1 ♂, Mt. Jianfengling, 1982. VI. 14. Yunnan: 1 ♂, Kunming City (2 000 m), 1980. VIII. 12.

Distribution: Hainan, Yunnan; India, Vietnam, Thailand.

Syntypistis umbrosa (Matsumura, 1927)

Quadricalcarifera umbrosa Matsumura, 1927, *J. coll. Agr. Hokkaido imp. Univ.* 19: 6.

Syntypistis umbrosa: Schintlmeister *et* Fang, 2001, *Neue Ent. Nachr.* 50: 51.

Desmeocraera okurtai Okano, 1963, *Ann. Rep. Gakugei Fac. Iwate Univ.* 16: 14.

Specimens examined: Fujian: 1 ♀, Mt. Wuyishan, 1982. VI. 5. Guangdong: 1 ♀, Mt. Jiulianshan, 1973. V. 20. Guangxi: 1 ♀, Pingxiang City (230 m), 1976. VI. 13. Hainan: 3 ♀ ♀, Mt. Jianfengling, 1980. III. 24. Sichuan: 1 ♂, Mt. Emeishan (800 – 1 000 m), 1957. IV. 25; 1 ♂ 1 ♀, Mt. Qingchengshan, 1979. VI. 4, 1980. VIII. 24; 1 ♀, Fengdu Co. (610 m), 1994. X. 5; 1 ♀, Panzhihua City, 1980. VIII. 22. Yunnan: 1 ♀,

Dali City (1 850 m), 1980. VII. 17; 1 ♀, Jinping Co. (1 600 m), 1979. V. 23; 1 ♀, Jingdong Co. (1 170 m), 1956. V. 25.

Distribution: Fujian, Guangdong, Guangxi, Hainan, Sichuan, Yunnan, Taiwan; India, Vietnam, Malaysia, Indonesia.

Syntypistis pryri (Leech, 1889)

Somera pryri Leech, 1889, *Trans. Ent. Soc. Lond.* 1889: 216.

Quadricalcarifera pryri: Kiriakoff, 1967: 83; Schintlmeister, 1992: 93.

Stauropus lama Oberthur, 1911, *Etudes Lep. Comp.* 5: 322

Specimens examined: Zhejiang: 1 ♀ 2 ♂ ♂, Mt. Tianmushan, 1972. VII. 30. Fujian: 1 ♂, Sangang, 1981. IV. 3; 1 ♀ 2 ♂ ♂, Mt. Wuyishan, 1982. IX. 13, 1983. VI. 9. Hubei: 1 ♂, Xingshan Co. (Longmenhe, 1 350 m), 1994. V. 7; 2 ♂ ♂, Xiaohokou (700 m), 1994. V. 11; 2 ♂ ♂, Shennongjia Forest Dist. (860 m), 1981. VIII. 21. Hunan: 1 ♂, Yongshun Co. (Shamuhe Forest Farm, 600 m), 1988. VII. 3. Guangxi: 1 ♂, Mt. Maershan, 1985. VII. 9. Sichuan: 3 ♂ ♂, Yanyuan Co. (1 270 m), 1984. VI. 30; 1 ♀, Panzhihua City, 1980. VIII. 22; 1 ♂, Jiu-zhaigou Co. (2 300 m), 1983. IX. 4. Yunnan: 1 ♀, Yanjin Co. (600 m), 1980. VI. 15; 1 ♀ 1 ♂, Lijiang Co. (2 500 m), 1984. VII. 21. Shaanxi: 1 ♀, Liuba Co., 1983. VIII. 15. Gansu: 1 ♀ 2 ♂ ♂, Wenxian Co. (1 450 m), 1999. VII. 2.

Distribution: Zhejiang, Fujian, Hubei, Hunan, Guangxi, Sichuan, Yunnan, Shaanxi, Gansu, Taiwan; Japan, Korea.

Syntypistis witoldi (Schintlmeister, 1997)

Quadricalcarifera witoldi Schintlmeister, 1997, *Entomofauna Suppl.* 9: 96.

Syntypistis witoldi: Schintlmeister *et* Fang, 2001, *Neue Ent. Nachr.* 50: 51.

Specimens examined: Yunnan: 1 ♂, Yunlong Co. (2 750 m), 1998. VIII.

Distribution: Yunnan; Vietnam, Myanmar, Thailand.

***Syntypistis parcevirens* (de Joannis, 1929)**

Stauropus parcevirens de Joannis, 1929, *Ann. Soc. Ent. France* 98: 455.

Stauropus sporadochlorus Bryk, 1949, *Arkiv for Zool.* 42 (A): 24.
Quadricalcarifera synechochlora Kiriakoff, 1963, *Bonn. Zool. Beitr.* 14: 262.

Quadricalcarifera plebeja Kiriakoff, 1963, *Bonn. Zool. Beitr.* 14: 265.

Specimens examined: Fujian: 1 ♂, Sangang, 1981. VI. 7; 2 ♂♂, Mt. Wuyishan, 1982. IV. 22, 1983. VI. 5. Hubei: 1 ♂, Shennongjia Forest Dist. (860 m), 1981. VIII. 18; 1 ♂, Hefeng Co. (1 240 m), 1989. VII. 29; 1 ♂, Mt. Xingdoushan (860 m), 1989. VII. 6. Hunan: 2 ♂♂ 2 ♀♀, Zhangjiajie City, 1988. VIII. 18; 1 ♀ 2 ♂♂, Sangzhi Co. (1 300 m), 1988. VIII. 11–15. Sichuan: 1 ♀, Fengdu Co. (610 m), 1994. X. Yunnan: 1 ♂, Yongshan Co. (1 400 m), 1980. VII. 6. Shaanxi: 1 ♀ 1 ♂, Ningshan Co. (1 580 m), 1998. VIII. 21; 2 ♂♂, Liuba Co. (1 020 m), 1998. VII. 18. Gansu: 2 ♂♂, Wenxian Co. (1 500 m), 1999. VII. 28; 1 ♀, Kangxian Co. (1 400 m), 1998. VII. 14; 1 ♀, Dang-cheng Co. (1 800 m), 1998. VII. 7.

Distribution: Fujian, Hubei, Hunan, Sichuan, Yunnan, Shaanxi, Gansu; Vietnam, Myanmar.

***Syntypistis nigribasalis nigribasalis* (Wileman, 1910)**

Stauropus nigribasalis Wileman, 1910, *Entomologist* 43: 289.

Quadricalcarifera notoprocta Yang, 1995, *Insects and Macrofungi of Gutianshan, Zhejiang*. 162.

Syntypistis nigribasalis: Schintlmeister et Fang, 2001, *Neue Ent. Nachr.* 50: 51.

Desmeocraera saitoni Matsumura, 1927, *J. Coll. Agr. Hokkaido* 19: 12.

Specimens examined: Fujian: 1 ♂, Sangang (700 m), 1979. VIII. 12. Jiangxi: 1 ♂, Shangrao Co., 1980. X. 9. Guangxi: 1 ♂, Jinxiu Co. (900 m), 1999. V. 18. Guizhou: 1 ♂, Mt. Fanjingshan (600 m), 2002. VI. 1.

Distribution: Zhejiang, Fujian, Jiangxi, Guangxi, Guizhou, Taiwan; Vietnam, Thailand, Indonesia, Malaysia (*ssp. tropica* Kiriakoff).

***Syntypistis perdis perdis* (Moore, 1879)**

Dasychira perdis Moore, 1879, *Descr. New Indian lepid. Insects Colln. late Mr. W. S. Atkinson* (1): 58.

Stauropus confusa Wileman, 1910, *Entomologist* 43: 289.

Cnethodonta horishana Matsumura, 1920, *Zool. Mag., Tokyo* 30: 140.

Quadricalcarifera kikuchii Matsumura, 1927, *J. Coll. Agr. Hokkaido imp. Univ.* 19: 12.

The costa of the valva are almost straight in the male genitalia.

Specimens examined: Yunnan: 1 ♀, Baoshan City, 1980. V.; 1 ♂, Yunlong, 1999. V. 10.

Distribution: Yunnan; N. India, Nepal, Thailand, Vietnam.

***Syntypistis perdis gutianshana* (Yang, 1995)**

Quadricalcarifera gutianshana Yang, 1995, *Insects and Macrofungi of Gutianshan, Zhejiang*. 162.

Syntypistis perdis gutianshana: Schintlmeister et Fang, 2001: 52.

The costa of valva are rather convex in male genitalia.

Specimens examined: Fujian: 1 ♀ 6 ♂♂, Sangang (700 m), 1979. IX. 11, 1980. IX. 28; 2 ♀♀ 4 ♂♂, Mt. Wuyishan, 1982. IV. 16–22, 1983. VI. 5; Guadun, 1 ♀, 1979. VIII. 12; Mt. 1 ♂, Longqishan (800 m), 1990. IX. 11; 1 ♂, Nanping Co., 1979. X. 26. Hunan: 1 ♂, Yongshun (600 m), 1988. VII. 3. Guangxi: 1 ♂, Jinxiu (900 m), 1999. V. 18; 1 ♂, Mt. Maoershan, 1985. VII. 9. Hainan: 1 ♀ 1 ♂, Mt. Jianfengling, 1983. IV. 14, 1984. V. 8.

Distribution: Zhejiang, Fujian, Hunan, Guangdong, Guangxi, Hainan, Taiwan.

***Syntypistis subgeneris* (Strand, 1915)**

Stauropus (*Quadricalcarifera*) *subgeneris* Strand, 1915, *Arch. Naturgesch.* 81 (A) 12: 160.

Quadricalcarifera subgeneris: Kiriakoff, 1967: 82, 1968: 119; Schintlmeister, 1992: 91.

Stauropus pulverulenta Wileman, 1910, *Entomologist* 43: 289.
Egonocia formosana Marumo, 1920, *J. Coll. Agr. Tokyo* 6: 335.

Stauropus wilemani Matsumura, 1924, *Trans. Sapporo nat. Hist. Soc.* 9: 38.

Specimens examined: Zhejiang: 2 ♀ ♀ 1 ♂, Hangzhou City, 1976. VII. 1 – 18; 1 ♀, Mt. Tianmushan, 1936. VII. Anhui: 1 ♂, Chuxian Co., 1972. VIII. 5. Fujian: 1 ♂, Jianyang Co., 1973. VI. 30; 1 ♀ 1 ♂, Nanjing Co., 1973. VII. 24; 1 ♂, Mt. Longqishan (790 m), 1991. IV. 24; 1 ♂, Sangang, 1979. VIII. 12. Jiangxi: 1 ♀, Dayu Co., 1975. VII. 16; 2 ♂ ♂, Doushui, 1975. VI. 29; 1 ♀ 1 ♂, Mt. Jiulianshan, 1975. VII. 28; Mt. Lushan, 1 ♂ 3 ♀ ♀, 1974. VI. 12, 1935. VIII. 27. Guangxi: 2 ♂ ♂, Nanning, 1956. IV. 1; 1 ♀ 1 ♂, Pingxiang City (230 m), 1976. VI. 16; 1 ♂, Guilin City, 1980. VI. 7; 2 ♂ ♂, Longsheng Co., 1980. VI. 11. Hainan: 2 ♀ ♀ 1 ♂, Xinglong, 1963. V. 14 – VI. 12.

Distribution: Jiangsu, Zhejiang, Anhui, Fujian, Jiangxi, Hunan, Guangdong, Guangxi, Hainan, Taiwan; Japan, Korea, Sikkim, Vietnam.

Syntypistis cupreonitens (Kiriakoff, 1963)

Quadricalcarifera cupreonitens Kiriakoff, 1963, *Bonn. Zool. Beitr.* 14: 265.

Syntypistis cupreonitens: Schintlmeister *et* Fang, 2001: 12 (list).

Specimens examined: Jiangxi: 1 ♂, Tonggu, 1974. VII. 14.

Distribution: Zhejiang, Jiangxi, Guangdong; Vietnam.

Syntypistis defector (Schintlmeister, 1997) *comb. nov.* (Fig. 2)

Quadricalcarifera defector Schintlmeister, 1997, *Entomofauna Suppl.* 9: 93.

This is the first record of this species in China.

Specimens examined: Yunnan: 1 ♂, Mt. Dengloushan (2 060 m), 1980. VII. 14.

Distribution: Yunnan; Vietnam.

Syntypistis melana Wu *et* Fang, *sp. nov.* (Fig. 3)

Wing expanse: ♂ 40 – 43 mm. Labial palpus blackish brown, ventral surface brownish yellow. Antenna base ringed with a tuft of long hairs which are reddish-brown, white and black. Head and thorax blackish brown, mixed somewhat with grayish white. Abdomen blackish brown. Forewing blackish brown,

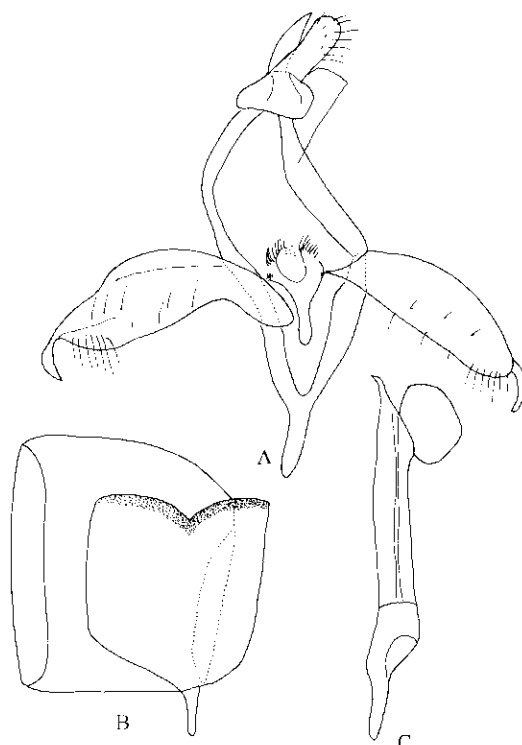


Fig. 2 *Syntypistis defector* (Schintlmeister)

A. male genitalia (雄性交配器); B. 8th tergite (第8背板) and 8th sternite (第8腹板); C. aedeagus (阴茎)

scattered with greenish small scales; outer fascia indistinct, waved. Hindwing pale reddish brown, costal margin darker.

Male genitalia: Posterior margin of 8th tergite concave in U-shape, anterior margin with a pair of long processes; posterior margin of 8th sternite concave, pointed in both sides, anterior margin with a long median process; uncus narrow and long, somewhat apically pointed; gnathos wide at base, bell-like in apical part; valva narrow and long, costa arched in middle, apex with a stout spine; juxta long, caudally hooked each side; aedeagus longer than valva, basally forked, apically pointed; saccus very long.

Holotype ♂: Guangxi: Mt. Maoershan (1 100 m, 25.8° N, 110.4° E), 1985. VII. 13.

Paratypes: 2 ♂ ♂, same data as holotype; Guizhou: Mt. Fanjingshan (600 – 1 600 m, 27.9° N, 108.6° E), 1 ♂, 2002. VI. 2.

Distribution: Guangxi, Guizhou.

Etymology: The name was derived from Greek “*melas*” (= black), corresponding to the dark forewing.

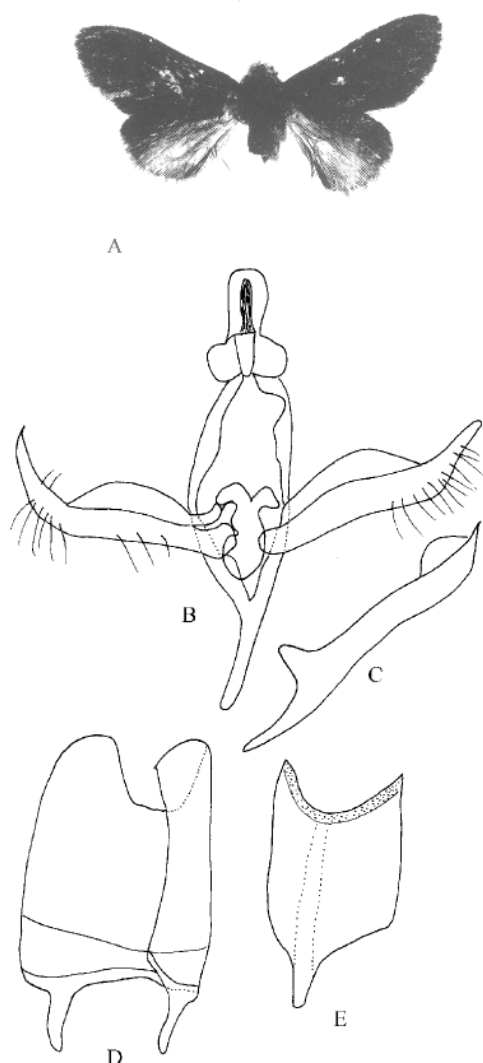


Fig. 3 *Syntypistis melana* Wu et Fang, sp. nov.

A. adult (成虫); B. male genitalia (雄性外生殖器);

C. aedeagus (阳茎); D. 8th tergite (第8背板);

E. 8th sternite (第8腹板)

Diagnosis: This new species is similar to *S. parcevirens* and *S. ambigua* in the male genitalia, but differs from them by the following characters: the posterior margin of the 8th tergite concave in a U-shape, the saccus very long and the apex of the aedeagus pointed.

References

- Cai R Q, 1979. Economic Insects Fauna of China. Fasc. 16. Lepidoptera: Notodontidae. Beijing: Science Press. 1 - 166 + 19pls. [蔡荣权, 1979. 中国经济昆虫志 第十六册 鳞翅目: 舟蛾科. 北京: 科学出版社. 1 - 166]
- Kiriakoff S G, 1967. Notodontidae. In: Wytzman P ed. Genera Insectorum fasc. 217 B. Kraainem. 1 - 238.
- Kiriakoff S G, 1968. Notodontidae. In: P Wytzman ed. Genera Insectorum 1968, fasc. 217 C. Kraainem. 1 - 269.
- Schintlmeister A, 1989. Zoogeographie der palaarktischen Notodontidae (Lepidoptera). *Neue Ent. Nachr.*, 25: 1 - 117.
- Schintlmeister A, 1992. Die Zahnspinner Chinas (Lepidoptera, Notodontidae). *Nachr. entomol. Ver. Apollo, Frankfurt/Main, Suppl.* 11: 1 - 343
- Schintlmeister A, 1997. Moths of Vietnam with special reference to Mt. Fan-si-pan. Family: Notodontidae. *Entomofauna, Suppl.* 9: 33 - 248.
- Schintlmeister A, Fang C L, 2001. New and less known Notodontidae from mainland China (Lepidoptera, Notodontidae). *Neue Ent. Nachr.*, 50: 1 - 141.
- Yang J K, 1995. Lepidoptera: Notodontidae. In: Zhu T ed. Insects and macrofungi of Gutianshan, Zhejiang. Hangzhou: Zhejiang Science and Technology Publishing House. 159 - 164.

中国胯舟蛾属分类研究

(鳞翅目: 舟蛾科)

武春生, 方承莱

(中国科学院动物研究所, 北京 100080)

摘要: 系统整理了中国胯舟蛾属 (*Syntypistis* Turner) 的全部种类共 20 种, 包括 1 新种黑胯舟蛾 *Syntypistis melana* Wu et Fang, sp. nov. 和 2 中国新记录种: 篙胯舟蛾 *Syntypistis hercules* (Schintlmeister) comb. nov. 与防胯舟蛾 *Syntypistis defector* (Schintlmeister) comb. nov., 后 2 种均为新组合。文中提供了分种检索表, 新种形态描述和外生殖器特征图。模式标本保存在中国科学院动物研究所动物标本馆。

关键词: 鳞翅目; 舟蛾科; 胯舟蛾属; 新种; 中国

中图分类号: Q969.42 **文献标识码:** A **文章标号:** 0454-6296 (2003) 03-0351-08